

WHAT IS CLAIMED IS:

1. A bicycle rear hub comprising:

a hub shaft configured and arranged to be non-rotatably mounted to a rear part of a bicycle frame;

a hub shell rotatably mounted on the hub shaft;

first and second bearing units arranged between the hub shaft and opposite ends of the hub shell;

a drive body rotatably mounted to one end of the hub shell;

a one-way clutch arranged between the drive body and the hub shell, the one-way clutch being configured to transmit rotation from the drive body to the hub shell in one direction;

a sprocket fixedly mounted to a radially outward-facing surface of the drive body such that it neither rotates nor moves axially relative to the drive body; and

a cover member mounted to the drive body to overlie the radially outward-facing surface of the drive body with a tip edge of the cover member contacting an outside lateral surface of the sprocket.

2. The bicycle rear hub as recited in claim 1, wherein

the cover member has a cylindrical part covering the radially outward-facing surface of the drive body and an enlarged diameter part extending from the cylindrical part to contact the sprocket with the tip edge of the cover member.

3. The bicycle rear hub as recited in claim 2, wherein

the sprocket is retained on the radially outward-facing surface of the drive body by a ring-shaped spring member that restricts axial movement of the sprocket; and

the enlarged diameter part of the cover member is configured and arranged to cover a radially outward-facing side of the spring member.

4. The bicycle rear hub as recited in claim 3, wherein

the first bearing unit has a first ball pushing member fastened to the hub shaft by screw threads, a first ball bearing member mounted in a non-rotatable manner to one end of the hub shell, and a plurality of spherical bodies arranged between the first ball pushing member and the first ball bearing member; and further comprising

a seal member disposed to seal a gap formed between a radially inward-facing surface of the drive body and a radially outward-facing surface of the first ball pushing member of the first bearing unit.

5. The bicycle rear hub as recited in claim 4, wherein the cover member is further provided with a flange part that extends radially inward from a base end of the cylindrical part such that the flange part overlies the seal as viewed in an axial direction along the hub shaft.

6. The bicycle rear hub as recited in claim 5, wherein the cover member is elastically interlocked with the radially outward-facing surface of the drive body.

7. The bicycle rear hub as recited in claim 6, wherein the drive body includes an annular depression formed in the radially outward-facing surface of the drive body; and the cover member includes a mating protrusion extending radially inward and meshing with the annular depression to elastically interlock the cover member with the radially outward-facing surface of the drive body.

8. The bicycle rear hub as recited in claim 1, wherein the sprocket is retained on the radially outward-facing surface of the drive body by a ring-shaped spring member that restricts axial movement of the sprocket; and the cover member is configured and arranged to cover a radially outward-facing side of the spring member.

9. The bicycle rear hub as recited in claim 1, wherein the first bearing unit has a first ball pushing member fastened to the hub shaft by screw threads, a first ball bearing member mounted in a non-rotatable manner to one end of the hub shell, and a plurality of spherical bodies arranged between the first ball pushing member and the first ball bearing member; and further comprising

a seal member disposed to seal a gap formed between a radially inward-facing surface of the drive body and a radially outward-facing surface of the first ball pushing member of the first bearing unit.

10. The bicycle rear hub as recited in claim 2, wherein the cover member is further provided with a flange part that extends radially inward from a base end of the cylindrical part.

11. The bicycle rear hub as recited in claim 10, wherein the sprocket is retained on the radially outward-facing surface of the drive body by a ring-shaped spring member that restricts axial movement of the sprocket; and

the enlarged diameter part of the cover member is configured and arranged to cover a radially outward-facing side of the spring member.

12. The bicycle rear hub as recited in claim 11, wherein the cover member is elastically interlocked with the radially outward-facing surface of the drive body.

13. The bicycle rear hub as recited in claim 12, wherein the drive body includes an annular depression formed in the radially outward-facing surface of the drive body; and

the cover member includes a mating protrusion extending radially inward and meshing with the annular depression to elastically interlock the cover member with the radially outward-facing surface of the drive body.

14. The bicycle rear hub as recited in claim 10, wherein the cover member is elastically interlocked with the radially outward-facing surface of the drive body.

15. The bicycle rear hub as recited in claim 14, wherein the drive body includes an annular depression formed in the radially outward-facing surface of the drive body; and

the cover member includes a mating protrusion extending radially inward and meshing with the annular depression to elastically interlock the cover member with the radially outward-facing surface of the drive body.

16. The bicycle rear hub as recited in claim 1, wherein
the cover member is elastically interlocked with the radially outward-facing surface of the drive body.

17. The bicycle rear hub as recited in claim 16, wherein
the drive body includes an annular depression formed in the radially outward-facing surface of the drive body; and
the cover member includes a mating protrusion extending radially inward and meshing with the annular depression to elastically interlock the cover member with the radially outward-facing surface of the drive body.

18. The bicycle rear hub as recited in claim 1, wherein
the cover member is a one-piece, unitary member that is constructed of an elastomeric material.

19. The bicycle rear hub as recited in claim 18, wherein
the cover member includes a cylindrical part covering the radially outward-facing surface of the drive body, an enlarged diameter part extending from an inner end of the cylindrical part to contact the sprocket with the tip edge of the cover member and a flange part extending radially inward from a outer end of the cylindrical part.

20. The bicycle rear hub as recited in claim 19, wherein
the drive body includes an annular depression formed in the radially outward-facing surface of the drive body; and
the cylindrical part of the cover member includes a mating protrusion extending radially inward and meshing with the annular depression to elastically interlock the cover member with the radially outward-facing surface of the drive body.